

Listing of Claims:

Claims 1-8 (Canceled).

9. (New) A transgenic mouse whose somatic and germ cells comprising a vector, wherein said vector comprises: a first transgene expression cassette comprising mouse agouti cDNA operably linked to a human keratinocyte specific K14 promoter, a second transgene expression cassette comprising RNA polymerase II large subunit promoter, and a chicken beta-globulin HS4 insulator; wherein said insulator and said first expression cassette are located at the 5' or 3' end of said second transgene expression cassette; the number of copies of said chicken beta-globin HS4 insulator is 1-6; and said insulator is in the same or opposite orientation relative said to said first and second expression cassettes in said vector.

10. (New) A method of producing a transgenic mouse comprising:

- (a) introducing a vector into a mouse embryo or a mouse ES cell and transferring said ES cell into a zygote;
- (b) transferring said embryo or said zygote comprising said ES cell into a pseudopregnant female mouse;
- (c) allowing said embryo or zygote to develop into an offspring;
- (d) selecting an offspring that expresses said agouti cDNA and has a coat color phenotype;

wherein said vector comprises: a first transgene expression cassette comprising mouse agouti cDNA operably linked to a human keratinocyte specific K14 promoter, a second transgene expression cassette comprising RNA polymerase II large subunit promoter,

and a chicken beta-globulin HS4 insulator; wherein said insulator and said first expression cassette are located at the 5' or 3' end of said second transgene expression cassette; the number of copies of said chicken beta-globin HS4 insulator is 1-6; and said insulator is in the same or opposite orientation relative said to said first and second expression cassettes in said vector.

11. (New) A vector comprising a first transgene expression cassette comprising mouse agouti cDNA operably linked to a human keratinocyte specific K14 promoter, a second transgene expression cassette comprising RNA polymerase II large subunit promoter, and a chicken beta-globulin HS4 insulator; wherein said insulator and said first expression cassette are located at the 5' or 3' end of said second transgene expression cassette; the number of copies of said chicken beta-globin HS4 insulator is 1-6; and said insulator is in the same or opposite orientation relative said to said first and second expression cassettes in said vector.

12. (New) A transgenic mouse whose somatic and germ cells comprising a vector, wherein said vector comprises: a dominant mouse coat color transgene expression cassette, a transgene expression cassette comprising RNA polymerase II large subunit promoter, and a chicken beta-globulin HS4 insulator.

13. (New) The transgenic mouse of claim 12 wherein said dominant mouse coat color transgene expression cassette comprises mouse agouti cDNA operably linked to a human keratinocyte specific K14 promoter.

14. (New) The transgenic mouse of claim 12 wherein said dominant mouse coat color transgene expression cassette comprises mouse cDNA operably linked to a mouse tyrosinase promoter.

15. (New) The transgenic mouse of claim 12 wherein said insulator and said first expression cassette are placed at the 5' or 3' end of said transgene expression cassette.

16. (New) The transgenic mouse of claim 12 wherein the number of copies of said chicken beta-globin HS4 insulator is 1-6.

17. (New) The transgenic mouse of claim 12 wherein said insulator is in the same or opposite orientation relative to said first and second expression cassettes.

18. (New) A method of producing a transgenic mouse comprising:

(a) introducing a vector into a mouse embryo or a mouse ES cell and transferring said ES cell into a zygote;

(b) transferring said embryo or said zygote comprising said ES cell into a pseudopregant female mouse;

(c) allowing said embryo or zygote to develop into an offspring;

(d) selecting an offspring that expresses said mouse cDNA and has a coat color phenotype;

wherein said vector comprises: a dominant mouse coat color expression cassette, a transgene expression cassette comprising RNA polymerase II large subunit promoter, and a chicken beta-globulin HS4 insulator.

19. (New) The method of claim 18 wherein said dominant mouse coat color transgene expression cassette comprises mouse agouti cDNA operably linked to a human keratinocyte specific K14 promoter.

20. (New) The method of claim 18 wherein said dominant mouse coat color transgene expression cassette comprises mouse cDNA operably linked to a mouse tyrosinase promoter.
21. (New) The method of claim 18 wherein said insulator and said first expression cassette are placed at the 5' or 3' end of said transgene expression cassette.
22. (New) The method of claim 18 wherein the number of copies of said chicken beta-globin HS4 insulator is 1-6.
23. (New) The method of claim 18 wherein said insulator is in the same or opposite orientation relative to said first and second expression cassettes.
- 24 (New) A vector comprising a dominant coat color expression cassette, a transgene expression cassette comprising RNA polymerase II large subunit promoter, and a chicken beta-globulin HS4 insulator.
25. (New) The vector of claim 24 wherein said dominant mouse coat color expression cassette comprises mouse agouti cDNA operably linked to a human keratinocyte specific K14 promoter.
26. (New) The vector of claim 24 wherein said dominant mouse coat color transgene expression cassette comprises mouse cDNA operably linked to a mouse tyrosinase promoter.
27. (New) The vector of claim 24 wherein said insulator and said first expression cassette are placed at the 5' or 3' end of said transgene expression cassette.
28. (New) The vector of claim 24 wherein the number of copies of said chicken beta-globin HS4 insulator is 1-6.
29. (New) The vector of claim 24 wherein said insulator is in the same or opposite

orientation relative to said first and second expression cassettes.